REMARKS/ARGUMENTS

Restriction Requirement

The Official Action mailed May 16, 2006 asserts there are 2 distinct inventions (identified as Groups I and II) claimed in the referenced application.

ELECTION OF GROUP WITH TRAVERSE

In order to comply with the requirements of the Patent and Trademark Office, Applicants provisionally elect, *with traverse*, Group I (claims 1-19) drawn to a method of predicting a drug necessary to achieve a desired drug effect using patient clinical characteristics involving inputting a data set and training the computer neural network on the first data set.

DISCUSSION

It is respectfully submitted that the restriction is improper.

According to the Office Action, the claims of Group I relate to a method of predicting a drug necessary to achieve a desired drug effect using patient clinical characteristics involving inputting a data set and training the computer neural network on the first data set, and the claims of Group II relate to a method of predicting a drug necessary to achieve a desired drug effect using patient clinical characteristics involving using the first neural network to generate a second data set and training the second data set.

Thus, it is clear from the Office Action's summary of the claims of each Group that any search and consideration of the claimed subject matter of Group I will likely uncover references that would be considered by the Office during the examination of the claimed subject matter of Group II.

This is further reinforced by the Office Action itself, that states that the claims of Group I are classified in class 702, subclass 20, and the claims of Group II are classified in class 702, subclass 20. In other words, the claims of Groups I and II are classified in the *same class and subclass*: class 702, subclass 20.

Accordingly, the searches for these two groups of claims cannot in any way be said to be completely "distinct" or "independent." This does not mean that the claims necessarily stand or fall together, but the overlapping nature of the searches remains and mitigates against a restriction requirement.

Examination of the patent application would be most expeditious by examining all pending claims together. As Section 803 of the MPEP explains, there are two criteria for a proper requirement for restriction between patentably distinct inventions: (i) the inventions must be independent or distinct as claimed, and (ii) there must be a serious burden on the Examiner if restriction is not required. Consequently, as set forth in MPEP 803:

If the search and examination of all of the claims in an entire application can be made without serious burden, the Examiner must examine them on the merits, even though they include claims to distinct or independent inventions.

The restriction requirement is improper because the Examiner has not shown that a search and examination of the entire application would cause a *serious* burden, as required by Section 803 of the MPEP for proper restriction.

Indeed, the Office Action has already acknowledged that the search and consideration of both Groups I and II will overlap, since both Groups are classified in the *same* class and subclass. Thus, there has been no showing of a serious burden as required by Section 803 of the MPEP.

While the inventions defined by the claims may be distinct or independent, there is no demonstration that the search and examination of all the pending claims would entail a serious burden to the Examiner. In particular, it is submitted that any additional burden on the Examiner in considering Groups I and II together is not so serious as to require restriction, and therefore, Applicants respectfully request withdrawal of the restriction requirement.

Conclusion

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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